B. Inspection and Servicing

1) Measure the specific gravity of the battery electrolyte with a hydrometer and if it is below 1.200 (corrected to 20°C), the battery should be recharged. The specific gravity is calibrated on the stem of the float and the reading is taken at the fluid level with the float buoyant. (Fig. 160)

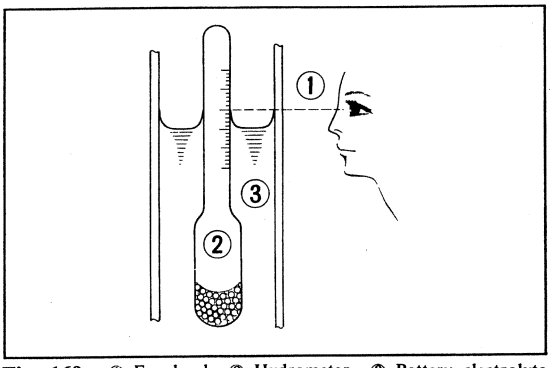

Fig. 160 ① Eye level ② Hydrometer ③ Battery electrolyte

2) If any cell is found to be below the lower level mark on the battery case, add distilled water to bring the level up to the upper level mark. If the electrolyte evaporation rate is unusually great, the charging system should be checked for possible malfunction. If the battery case is cracked or damaged, replace with new one.

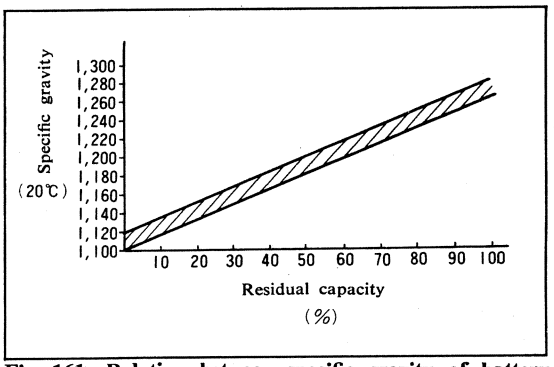

Fig. 161 Relation between specific gravity of battery electrolyte and electrical capacity

3) Check the poor battery connection due to corrosion of the connector and terminal, flaking of the paste from vibration and sulfation. The flaked paste remains on bottom remarkably, replace with new one. (Fig. 162)

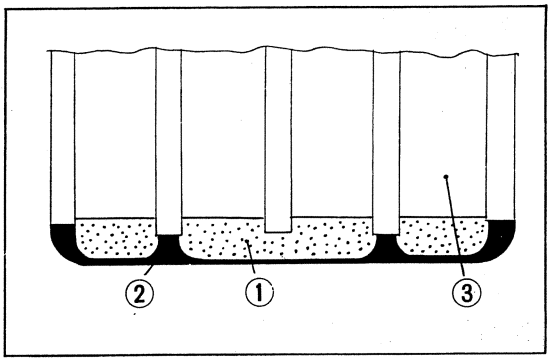

Fig. 162 ① Flaked paste ② Bottom ③ Cathode plate

C. Battery Charging

1) Quick-charge method of charging the battery will seriously effect the battery service life, therefore, it is recommended that this method not be used. When the rapid charge is required, the battery should be recharged at a rate of **0.2 AH.**
2) During the charging process, hydrogen gas will be generated, therefore, open flame should be kept away.
3) After the recharging is completed, the battery should be washed with water to remove spilled electrolyte and the terminals coated with grease.

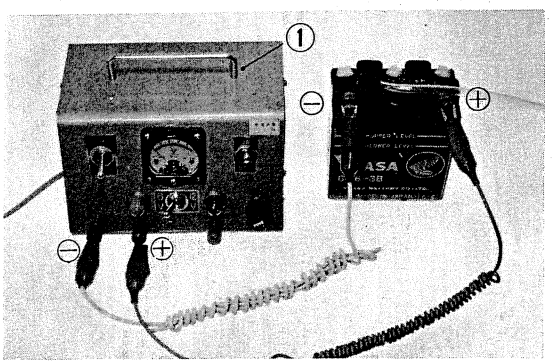

Fig. 163 Battery charging
① Battery charger